PCV32

SOCIOECONOMIC RELEVANCE OF TREATMENT OF CHRONIC HEART FAILURE STAGE NYHA II WITH CRATAEGUS EXTRACT WS® 1442—A PROSPECTIVE 3-YEAR PHARMACOECONOMIC STUDY

Rychlik R[1], Pfeil T[1], Daniel D[1], Habs M[2], Klapper HG[2]
[1]Institute of Empirical Health Economics, Burscheid, Germany; [2]Dr. Willmar Schwabe Arzneimittel, Karlsruhe, Germany

OBJECTIVES: A prospective 3-year observational study has been conducted from 1999 to 2002 to evaluate the pharmacoeconomics of hawthorn-extract treatment of CHF at stage NYHA II. In a cost-utility-analysis (CUA) hawthorn treatment (crataegus extract WS® 1442 as mono- or add-on-therapy) was compared to any other treatment option. Interim results of the study were presented in 2001 and 2002, now the final results are available. **METHODS:** Open, non-randomized observational cohort study with matched-pairs evaluation. The first cohort (Hawthorn-Cohort, HC) comprised patients receiving hawthorn-extract therapy of CHF; in the second cohort (Conventional-Cohort, CC) patients with any other treatment were observed. A number of 116 pairs were necessary for evaluation. For measuring HRQL the EuroQoL-5D was used. Matching criteria were demographic factors and clinical diagnosis. The perspective of the German statutory health insurance funds was applied. **RESULTS:** From 140 study centres 614 patients finished the study (HC: 383; CC: 231). Thereof 153 pairs could be established. Mean direct costs per year for HC and CC amounted to 807€ (median: 511€) and 798€ (median: 525€), respectively ($p = 0.905$). Cost-driving factor was drug acquisition (median HC: 287€, CC: 280€; $p = 0.521$). Significantly fewer prescriptions were done in HC for concomitant ACE-inhibitors, diuretics, digitalis, and beta-blockers. The clinical symptoms dyspnea and fatigue in HC were significantly improved in comparison to CC. During 3 years in the HC 0.240 QALYs were gained (CC: 0.234; $p = 0.867$). Costs per QALY gained amounted to 10,113€ and 10,244€ for HC and CC, respectively. **CONCLUSIONS:** Hawthorn extract WS® 1442 represents an effective treatment alternative in early stages of CHF. Outcomes and costs are comparable to treatment with ACE-inhibitors, diuretics, digitalis, and/or beta-blockers, which are recommended by international guidelines. The symptoms dyspnea and fatigue, which markedly affect the patients' daily activities, can be improved with WS® 1442.

PCV33

MODELING THE ECONOMIC IMPACT OF NEW IMPLANTABLE DEFIBRILLATORS WITH A LONGER LIFETIME

Lamarsalle L[1], Vainchtock A[2], Le Heuzey JY[3], Matalon C[4], Hazard JR[4]
[1]GYD institut—division of IMS Health, Lyon, France; [2]GYD institut—division of IMS Health; [3]Hôpital Européen Georges Pompidou; [4]Guidant France SAS

OBJECTIVES: Vitality 2EL, a new implantable defibrillator (ICD), presents a major advantage: a longer lifetime increasing delay before replacement leading to less reimplantations. This study aims to compare direct medical costs, using this new ICD, Vitality 2EL, versus its main competitors in France. **METHODS:** The first step was to identify among patients included into EVADEF (French national registry of ICD-implanted patients), 7 homogeneous groups according to age at first implant. Then, within each group, we determined average ages and life expectancies using Deale's method and data from the French national statistical institute (INSEE). A Markov model was built using DATA Tree age Pro 2004 taking into account complication rates from literature. Direct medical costs were assessed from the French health care payer's perspective and a 2.5% discount rate was applied. This model was applied to those 7 groups, per single & dual chamber defibrillators (VR & DR), in primary and secondary prevention, and for warranted period (defined by manufacturers) and projected longevity at 15%/50% pacing. **RESULTS:** The model shows an average cost savings range from 34 to 6356€ per patient with Vitality 2EL versus competitors. **CONCLUSION:** Implanting a longer lifetime ICD is clinically beneficial for patients. Furthermore, we demonstrated that it allows cost savings for health care payers.

PCV34

COST-EFFECTIVENESS OF ANTICOAGULATION WITH BIVALIRUDIN VS. HEPARIN AND GLYCOPROTEIN INHIBITORS IN PATIENTS UNDERGOING PERCUTANEOUS CORONARY INTERVENTION IN SWEDEN

Borg S[1], Persson U[1], Conradson TB[2], Ericsson K[2]
[1]Swedish Institute for Health Economics, Lund, Sweden; [2]Nycomed Group, DK-4000 Roskilde, Denmark

OBJECTIVE: To analyse the cost-effectiveness of anticoagulation with bivalirudin compared to heparin and GlycoProtein Inhibitors IIb/IIIa (GPIs) in patients undergoing Percutaneous Coronary Intervention (PCI) in Sweden. **METHODS:** As treatment practice varies between hospitals, e.g. the fraction of patients receiving GPI varies, the model analyses a patient cohort where heparin is combined with GPIs to a variable percentage (% GPIs) and the remaining patients receive heparin monotherapy. The Swedish Council on Technology Assessment in Health Care has estimated that GPIs are being used in a range of 40–50% of all PCIs. Abciximab is the only GPI with indication for PCI in Sweden, and it was therefore used as the comparator. Pooled data from applicable studies (REPLACE-2, EPISTENT, ESPRIT), provided probabilities for the events; death, myocardial infarction (MI), urgent revascularisation (UR) and major and minor bleedings according to the TIMI definitions. Treatment costs (year 2004) were collected for each complication from four Swedish hospitals, and official drug prices from the Swedish pharmacopeia. The model was evaluated using stochastic evaluation, in a Swedish Health Care perspective, in a 30-day time frame. The modelled patient population was on average 63 years of age, 75% male. **RESULTS:** Compared to a 40–50% usage of GPIs, treatment with bivalirudin reduced ($p < 0.05$) all complications (e.g. by 9.3 MIs, 1.9 URs, 14.4 bleedings and 1.5 deaths in 1000 treated patients, of which 40% received a GPI), and at the same time significantly reduced total costs for drugs and health care (87 SEK/patient, 95% CI 21 to 157 at 40% GPIs, or 935 SEK/patient, 95% CI 867 to 997 at 50% GPIs). **CONCLUSIONS:** Treatment with bivalirudin as compared to heparin and GPIs, significantly reduced all studied complications, and resulted in significant savings in total costs of drugs and health care in Sweden.

PCV35

ECONOMIC ASSESSMENT OF SWITCHING TO EZETIMIBE CO-ADMINISTERED WITH SIMVASTATIN IN SPAIN FOR A COHORT OF PATIENTS NOT AT GOAL ON ATORVASTATIN MONOTHERAPY

Davies GM[1], Alemao E[2], Nocea G[3], Yin D[2], Cook JR[1]
[1]Merck & Co., Inc, Blue Bell, PA, USA; [2]Merck & Co, Whitehouse Station, NJ, USA; [3]Merck, Sharp & Dohme de España, Madrid, Spain

OBJECTIVE: Assess cost-effectiveness of switching patients to ezetimibe 10 mg (EZ10) co-administration with simvastatin 20 mg (S20) versus an atorvastatin titration strategy (patients are titrated to goal or maximum atorvastatin dose of 80 mg) in CHD and CHD equivalent patients not at goal with atorvastatin 10 mg (A10) monotherapy. Method: Decision-analytic model